

disclosure supports the new claim limitation, the new claimed feature is not new matter. *In re Wright*, 866 F.2d 422 (Fed. Cir. 1989).

Furthermore, the U.S. Patent and Trademark Office bears the initial burden of presenting a *prima facie* case of unpatentability. Insofar as the written requirement is concerned, that burden is only discharged by presenting evidence or reasons why persons skilled in the art would *not recognize* in the specification a description of the invention defined by the claims.

Applicants respectfully submit that the Examiner's rejections fail to meet a *prima facie* case for unpatentability since the support for the claims can be found in the present specification.

Applicants have carefully reviewed this matter and submit that the claims are supported as follows:

**1. Claim 1, Specific Gravity of the Core Less Than 1.4**

A wide array of weights and diameters for cores of the present invention golf balls are disclosed throughout the application. A calculation of core density (or specific gravity) may then be made.

Specifically, a wide array of core diameters are disclosed: 1.2 inches (3.048 cm) (p. 47); 1.6 inches (4.064) (p. 47); 1.2 - 1.6 inches (3.048 - 4.064 cm)(p. 47); 1.0 inch (2.54 cm) (p. 47); 2.0 inches (5.08 cm) (p. 47); 1.0 - 2.0 inches (2.54 - 5.08 cm) (p. 47); 1.545 inches (3.9243 cm) (p. 61 and 72); 1.43 inches (3.6322 cm) (p. 72); and 1.47 inches (3.7338 cm) (p. 74).

These diameters yield a range of core volumes from about 8.58 cm<sup>3</sup> (for a 1.0 inch diameter core) to 68.64 cm<sup>3</sup> (for a 2.0 inch diameter core).

A wide array of core weights are disclosed: 25 g (p.46); 40 g (p.46); 25 - 40 g (p.46); 30 g (p.46); 30 - 40 g (p.46); 36.5 g (p. 61); and 32.7 g (p. 74).

These core volumes and weights yield a wide array of core densities (or specific gravities) from about 0.36 g/cm<sup>3</sup> (based on a core weight of 25 g and a volume of 68.64 cm<sup>3</sup>) to about 4.66 g/cm<sup>3</sup> (based on a core weight of 40 g and a volume of 8.58 cm<sup>3</sup>). A core specific gravity of 1.17 is noted at page 61.

Therefore, Applicants respectfully submit that specific gravities of the core less than 1.4 are disclosed throughout the specification and, thus, this ground of rejection should be withdrawn.

**2. Claim 1, Specific Gravity of the Intermediate Layer Less Than 1.2**

A wide array of weights and thicknesses for cores and intermediate layers of the present application are also disclosed throughout the application. A calculation of intermediate layer density (or specific gravity) may then be made.

Specifically, a wide array of intermediate layer thicknesses are disclosed: 0.01 inches (0.0254 cm) (p. 13); 0.10 inches (0.254 cm) (p. 13); 0.01 - 0.10 inches (0.0254 - 0.254 cm) (p. 13); 0.03 inches (0.0762 cm) (p. 13); 0.07 inches (0.01778 cm) (p. 13); 0.03 - 0.07 inches (0.0762 - 0.1778 cm) (p. 13); 0.05 inches (0.127 cm) (p. 13); 0.05 - 0.10 inches (0.127 - 0.254 cm) (p. 13); 0.0375 inches (0.09525 cm) (p. 63); 0.0675 inches (0.17145 cm) (p. 61); and 0.09 inches (0.2286 cm) (p. 72).

These thicknesses are added to the previously noted range of core sizes to yield a wide range of volumes for the intermediate layers. The calculation is performed by identifying the core diameters as described above. The intermediate layer thickness is then added twice (once for each side of the golf ball) to the core diameter to establish a diameter for the core plus the intermediate layer. Once this diameter is established, a total volume for the core and intermediate layer can be calculated. Finally, the volume of the core (previously determined) is subtracted from the core plus intermediate layer figure, which results in the determination of the volume of the intermediate layer.

The diameter of the core plus the intermediate layer (the inner cover layer) is disclosed throughout the application. Specifically, values disclosed include: 1.48 inches (3.7592 cm) (p. 13); 1.66 inches (4.2164 cm)(p. 13); 1.50 inches (3.81 cm) (p. 13); 1.70 inches (4.318 cm) (p. 13); 1.50 - 1.70 inches (3.81 - 4.318 cm) (p. 13); 1.25 inches (3.175 cm) (p. 48); 1.60 inches (4.064 cm) (p. 48); 1.25 - 1.60 inches (3.175 - 4.064 cm); 1.67 inches (4.2418 cm) (p. 50); 1.50 - 1.67 inches(3.81 - 4.2418 cm) (p. 50); 1.61 inches (4.0894 cm) (p. 72); 1.57 inches (3.9878 cm) (p. 74); 1.620 inches (4.1148 cm) (p. 64); 1.63 inches (4.1402 cm) (p. 64); 1.64 inches (4.1656 cm) (p. 64); and 1.68 inches (4.2672 cm) (p. 64).

These diameters yield a wide array of core plus intermediate layer volumes from about 16.758 cm<sup>3</sup> (for a 1.25 inch diameter core plus intermediate layer) to 42.155 cm<sup>3</sup> (for a 1.70 inch diameter core plus intermediate layer).

Further, a wide array of core plus intermediate volumes are disclosed based on the layer thickness of the intermediate layer and the diameter of the core yielding volumes from about 9.105 cm<sup>3</sup> (for a core with a diameter of 1.0 inches

with an intermediate cover thickness of 0.01 inches) to about 91.362 cm<sup>3</sup> (for a core with a diameter of 2.0 inches with an intermediate cover layer thickness of 0.1 inches).

Subtracting out the volume of the cores yields the intermediate layer volume range which is from about 0.525 cm<sup>3</sup> (for a core with a diameter of 1.0 inch with an intermediate cover layer thickness of 0.01 inches) to about 22.722 cm<sup>3</sup> (for a core with a diameter of 2.0 inches and an intermediate layer thickness of 0.1 inch).

These intermediate layer volumes yield a wide array of inner cover layer densities (or specific gravities) in conjunction with a typical weight of the layer, 5.7 g (as disclosed on p. 74). The intermediate layer densities range from about 10.857 g/cm<sup>3</sup> (based on an intermediate layer weight of 5.7 grams and a volume of 0.525 cm<sup>3</sup>) to about 0.251 g/cm<sup>3</sup> (based on an intermediate layer weight of 5.7 grams and a volume of 22.722 cm<sup>3</sup>). An intermediate layer specific gravity of 0.95 is noted at page 61 and numerous other specific gravities of the intermediate layer between 0.953 and 0.960 are noted at page 24.

Applicants respectfully submit that the present application does disclose an intermediate layer with a specific gravity less than 1.2, and thus, satisfies the requirements under 35 U.S.C. 112, first paragraph.

**3. Claim 1, JIS-C Hardness of the Intermediate Layer from 85 to 89.9**

The Examiner asserted that there is no support in the specification for claiming a JIS-C hardness of 85 to 89.9. Applicants respectfully point out that the JIS scale corresponds to the commonly used "Shore" scale. As such, a JIS-C value of 85-89.9 correlates to a Shore C value of 85-89.9 for the intermediate layer. The specification for the present invention discloses, in numerous places, preferred Shore D hardness for the inner cover layer of at least 60 (pp. 14 and 30); 68 (p. 72); and 70 (p. 74). In ASTM D-2240 (attached herewith as Exhibit 1), the standard by which the Shore scale is generally accepted by those skilled in the art, a comparison chart relating Shore C to Shore D values is disclosed in Note 2. While the chart cannot be used for conversion, it is a good indicator of the relationship between Shore D and Shore C hardness as known to one skilled in the art. According to the chart, a value between 80 and 90 on the Shore C scale will correspond to a value of about 60 on the Shore D scale.

The Federal Circuit has allowed the comparison of one scale of Shore hardness to another scale of Shore hardness. See, *Chemcast Corp. v. Arco Indus. Corp.*, 16 U.S.P.Q.2d 1033 (Fed.Cir. 1990). The court agreed with the district court in that case that there can be overlap between two Shore scales, and stated in footnote 1:

There is some overlap in the range of use of the durometers. A conversion chart is published by the Shore Instruments & Manufacturing Co. which shows that the range of 30 to 100 on the scale of a Shore A durometer corresponds to the range of 6 to 58 on a Shore D durometer. The American Society for Testing Materials (ASTM) sets the standards to [sic, with] which the plastics and rubber industry comply [sic, complies] and recommends that hardness above 90 on the Shore A scale be measured with a Shore D durometer for greater accuracy. *Chemcast Corp. v. Arco Indus. Corp.*, 5 U.S.P.Q.2d 1225, 1227 (E.D.Mich. 1987).

*Id* at 1034. Thus, in using the comparison chart as published by the ASTM, it is clear that the disclosure of a Shore D hardness of 60 and above, as in the present application, corresponds to a Shore C hardness in the range of 80-90.

Based on the foregoing, Applicants respectfully request that this ground of rejection has been overcome.

**4. Claim 1, Specific Gravity of the Intermediate Layer Lower than the Specific Gravity of the Core**

The Examiner has also contended that the present application does not support the recitation of claim 1 that the specific gravity of the intermediate layer is lower than the specific gravity of the core.

Applicants respectfully point out that on page 61, example 5, the specification of the present application discloses a core with a specific gravity of about 1.17 with an inner cover that has a specific gravity of 0.95. Clearly the specific gravity of the intermediate layer is less than the specific gravity of the core in this example. Furthermore, the previously noted ranges of specific gravities for the intermediate layer and core respond to this claim recitation.

Accordingly, Applicants submit that this ground of rejection has been overcome.

**5. Claim 1, Upper Limit of the Thickness of the Cover**

The Examiner rejected claim 1 under 35 U.S.C. 112, first paragraph as containing subject matter not described in the specification. Specifically, the Examiner stated that the upper limit of the thickness of the cover was new matter.

Applicants have amended claim 1 as per the specification at page 13 for the upper limit of the thickness of the cover. Accordingly, this ground of rejection has been remedied.

**6. Claim 3, JIS-C Hardness**

Claim 3 was rejected under 35 U.S.C. 112, first paragraph, for purportedly containing subject matter not described in the specification. Specifically, the Examiner contended that JIS-C hardness of the core from 45 to 80 is not disclosed within the specification. Additionally, the Examiner contended that JIS-C hardness of the cover from 81.1 to 85 is not within the disclosure of the specification.

Applicants have amended claim 3 and removed references to the JIS-C hardness of the core, while modifying the range disclosed for the JIS-C hardness of the cover. Accordingly, this ground of rejection has been remedied.

**7. Claim 6, Difference in the Specific Gravity Between the Core and Intermediate Layer is 0.1 to 0.5**

Claim 6 was rejected by the Examiner under 35 U.S.C. 112 for purportedly lacking support from the specification. Specifically, the Examiner stated that there was no support to claim a difference in the specific gravity between the core and intermediate layer from 0.1 to 0.5.

As stated above, on page 61, the specification discloses a golf ball with a core having a specific gravity of about 1.17 and an inner cover with a specific gravity of about 0.95. The difference in the specific gravities in this example is 0.22, which is clearly within the range claimed in claim 6. Furthermore, the wide ranges of specific gravity for the core and the intermediate layer readily provide support for this claimed range of differences.

Applicants respectfully point out that the test for claim support under the first paragraph of 112 is whether the disclosure as originally filed reasonably conveys to the artisan that the inventor had possession at that time of the later-claimed subject matter. See, *Ralston Purina Co. v. Far-Mar Co., Inc.*, 772 F.2d 1570, 227 U.S.P.Q. 177 (Fed.Cir. 1985). Clearly, the claimed range of specific gravity differences is adequately supported by the present specification and therefore meets the requirements under 35 U.S.C. 112, first paragraph. As such, Applicants respectfully submit that this ground of rejection has been overcome.

**8. Claim 7, Specific Gravity of Intermediate Layer is 0.9 to 1.0**

Claim 7 was rejected by the Examiner under 35 U.S.C. 112 for purportedly lacking support from the specification. Specifically, the Examiner contended that there was no support to claim a specific gravity of the intermediate layer from 0.9 to 1.0.

Applicants respectfully submit that a specific gravity for the intermediate layer of 0.95 is disclosed within the specification on page 61. Further, on page 24 of the specification, numerous densities of the inner cover layers used for the present invention balls are disclosed between the range of 0.953 to 0.960. In addition, the wide range of intermediate layer specific gravities clearly provide support for this recited range.

Applicants respectfully remind the Examiner that the test for claim support under the first paragraph of 112 is whether the disclosure as originally filed reasonably conveys to the artisan that the inventor had possession at that time of the later-claimed subject matter. See, *Ralston Purina Co. v. Far-Mar Co., Inc.*, 772 F.2d 1570, 227 U.S.P.Q. 177 (Fed.Cir. 1985). Clearly, the claimed range of specific gravities finds support in the specification and therefore meets the requirements under 35 U.S.C. 112, first paragraph. As such, Applicants respectfully submit that this ground of rejection has been overcome.

**9. Claim 8, JIS-C Hardness of the Intermediate Layer from 85 to 89.9**

Claim 8 was rejected under 35 U.S.C. 112, first paragraph, for purportedly containing subject matter not described in the specification. Specifically, the Examiner contended that JIS-C hardness of the intermediate layer from 85 to 89.9 is not disclosed within the specification.

As previously noted, the specification of the present application discloses a range of Shore D hardnesses for the intermediate layer. For instance, Shore D hardnesses of 60 (pp 14 and 30); 68 (p. 72); and 70 (P. 74) are disclosed. Using the previously noted comparison chart (Exhibit 1), a range of Shore C hardnesses are disclosed, such as from about 80 Shore C to about 100 Shore C. Accordingly, this ground of rejection has been overcome.

**B. Rejection Based on "Double Patenting" has been Overcome**

**1. Statutory Type Double Patenting**

The Examiner provisionally rejected claims 1 and 4 of the present application under 35 U.S.C. § 101 as allegedly claiming the same invention as that of claim 1 of copending application No. 08/926,194 and claims 1 and 4 of 08/926,246. For the reasons set forth below, Applicants respectfully submit that cancellation or amendment of the allegedly conflicting claims is not necessary, as the claims as presently pending and amended are not coextensive in scope with those of the noted copending cases. As such, Applicants respectfully request allowance of claims 1 and 4 as currently written.

In order to be rejected under double patenting, as the Examiner correctly points out, the invention must be drawn to identical subject matter. See, *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CC PA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CC PA 1970). Applicants respectfully submit that the claims as presently written do not recite identical subject matter as the noted claims from the two noted copending applications.

Claim 1 of copending Application No 08/926,194 (the '194 application) and claim 1 of copending Application No. 08/926,246 (the '246 application) do not recite identical subject matter as claim 1 of the present application. The first difference is that claim 1 of the present application claims a range of the outer cover of the golf ball of 1-2.54 mm, whereas claim 1 from both the '194 application and the '246 application claim a broader range of allowable values for the outer cover of the golf ball. Further, claim 1 from the present application recites that the intermediate layer is formed of an ionomer resin base composition. In contrast, claim 1 from the '194 application and '246 application do not recite the composition of the intermediate layers. As these two elements are different in claim 1 of the present application than in claim 1 of the copending '246 and '194 applications, it cannot be said that the inventions claim the same identical subject matter.

Thus, Applicants respectfully request the Examiner to withdraw the provisional rejection of claim 1 of the current application under 35 U.S.C. § 101.

Claim 4 has also been provisionally rejected by the Examiner as claiming the same invention as claim 4 of the '246 application. Applicants respectfully point out that both claims 4 are dependent upon claim 1 in both the '246 application and the present application, respectively. As a dependent claim, each claim 4 includes all of the recitations of its corresponding claim 1. As

explained above, claim 1 of the present application is distinguishable (and not identical subject matter) from claim 1 of the '246 application. As each dependent claim 4 necessarily incorporates its corresponding independent claim, it cannot be said that claim 4 of the two applications recite identical subject matter.

Thus, Applicants respectfully request the Examiner to also remove the provisional rejection of claim 4 of the current application under 35 U.S.C. § 101.

## **2. Obviousness-Type Double Patenting**

Claims 3 and 5-8 were rejected by the Examiner as being unpatentable over claims 3 and 5-8 of copending Application No. 08/926,194 and claims 1-8 of 08/926,246 under the judicially created doctrine of obviousness-type double patenting.

Applicants herewith submit a Terminal Disclaimer to this response to overcome the rejection under the judicially created doctrine of obviousness-type double patenting. Applicants respectfully request the Examiner to remove any rejections of obviousness-type double patenting based on this Terminal Disclaimer which is filed in accordance with 37 C.F.R. § 1.321.

## **C. Conclusion**

Applicants respectfully submit that all rejections have been overcome and that claims 1 and 3-8 are in condition for allowance.

Respectfully submitted,

FAY, SHARPE, FAGAN,  
MINNICH & McKEE, LLP



Richard M. Klein  
Reg. No. 33,000  
Mark E. Bandy  
Reg. No. 35,788  
1100 Superior Avenue  
7th Floor  
Cleveland, OH 44114-2518  
(216) 861-5582



CERTIFICATE OF MAILING

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By: Mary Ann Temesvari  
Mary Ann Temesvari